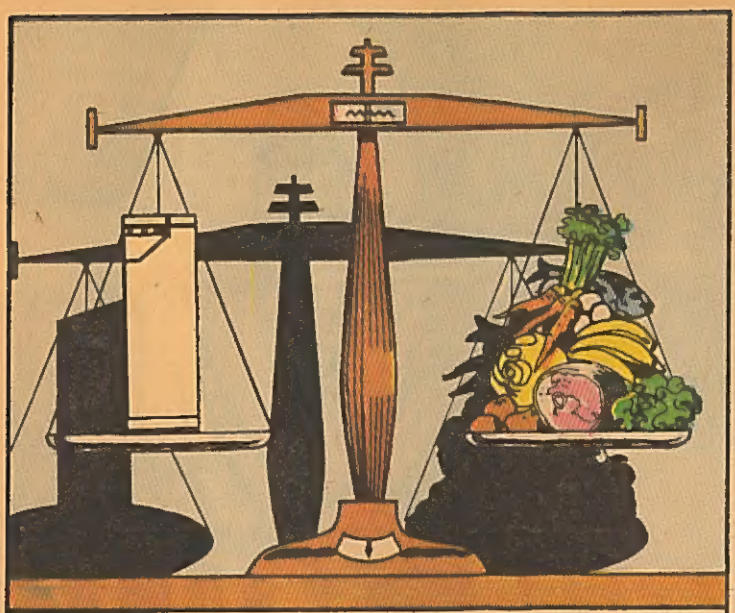
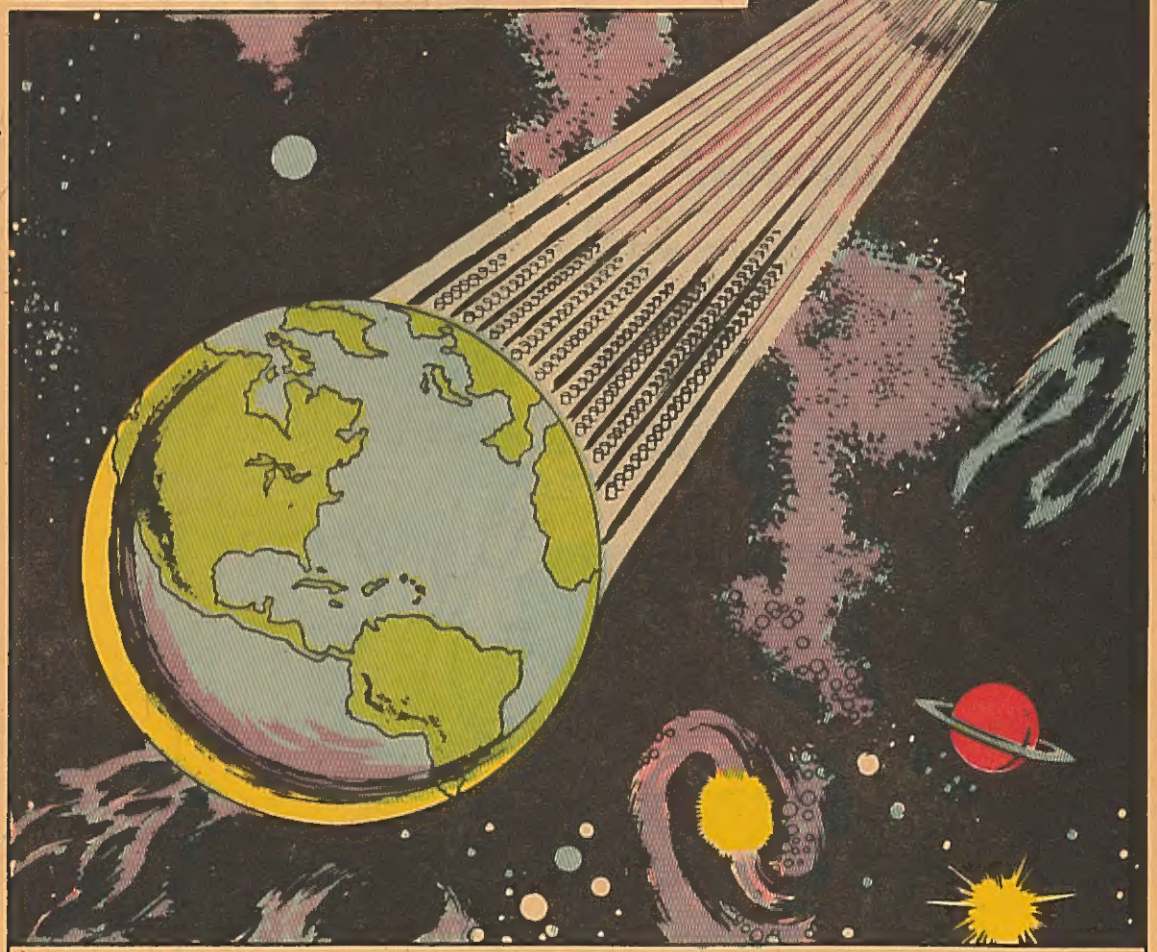
the MAGIC of MILK
amazing
but true facts
about milk and
milk protection

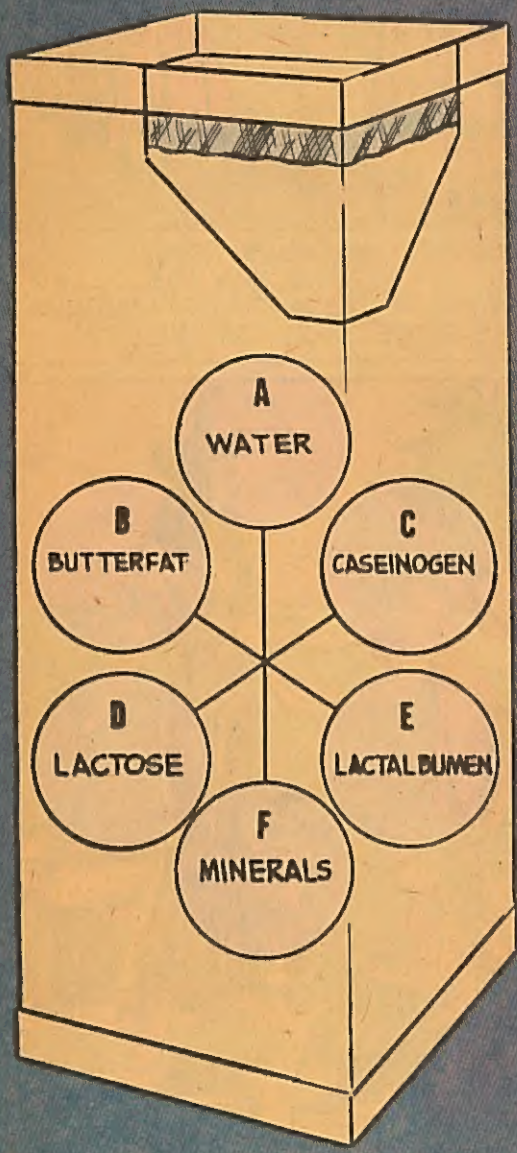


MILK IS THE ONLY COMPLETE FOOD PRODUCED BY NATURE AND THE MOST IMPORTANT TO MAN.



MORE THAN 216 BILLION GLASSES OF MILK ARE CONSUMED BY AMERICANS EACH YEAR, WHICH HELPS MAKE US THE HEALTHIEST COUNTRY ON EARTH.

WHAT MAKES MILK SO VALUABLE?



TO FLAVOR-GUARD MILK'S NATURAL GOODNESS, THIS MODERN PLASTIC-COATED PAPER MILK CARTON HAS BEEN DEVELOPED.

A

ALL LIVING THINGS REQUIRE WATER; OUR BODIES, IN FACT ARE 2/3 WATER. A PERSON WILL LOSE ABOUT 3 QUARTS OF WATER EACH DAY THROUGH PERSPIRATION AND OTHER MEANS. MOST FRUITS, VEGETABLES AND MEATS ARE OVER 7% WATER.

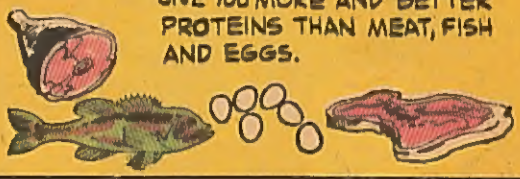
B

BUTTERFAT CONSISTS OF TINY BUBBLES OF MICROSCOPIC SIZE. THERE ARE MILLIONS OF THEM IN A TEASPOON OF MILK.

BUTTERFAT PLAYS AN IMPORTANT ROLE IN YOUR HEALTH CONTRIBUTING A SOURCE OF ENERGY THAT IS MORE EASILY DIGESTED THAN OTHER FATS. NEXT TO COD LIVER OIL, BUTTERFAT IS THE GREATEST SOURCE OF VALUABLE VITAMIN 'A', AN ESSENTIAL TO HEALTH AND GROWTH.

C & E

CASEINOGEN AND LACTALBUMEN CARRY THE PROTEINS SO NECESSARY TO HEALTH GIVE YOU MORE AND BETTER PROTEINS THAN MEAT, FISH AND EGGS.



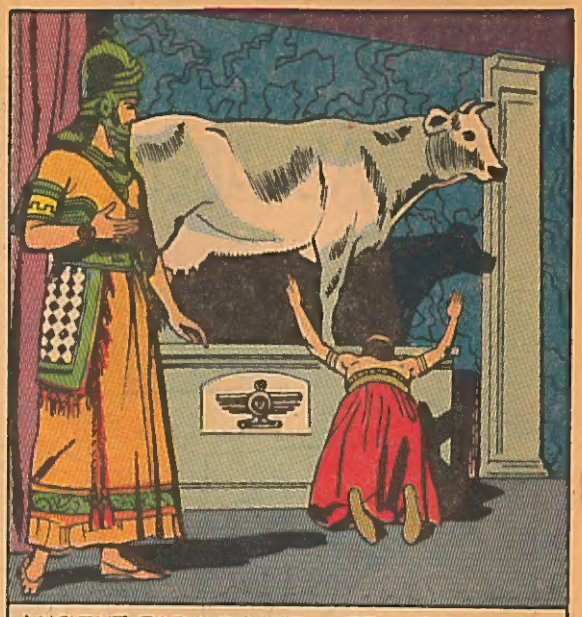
D

LACTOSE IS SUGAR IN MILK WHICH GIVES ENERGY AND PEP AND AIDS IN THE DIGESTION OF FOOD.

F

CALCIUM, SALT, IRON AND PHOSPHORUS HELP THE GROWTH OF BONES AND ARE ACCEPTED BY THE HUMAN BODY EASIER THAN THE SAME MINERALS AS FOUND IN CARROTS, SPINACH AND OTHER VEGETABLES.

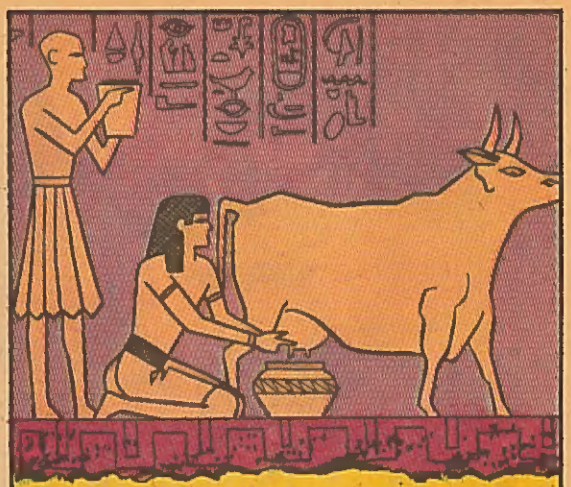
THE OLDEST KNOWN REFERENCES TO MILK, 4000 YEARS BEFORE CHRIST, WERE FOUND BY ARCHEOLOGISTS NEAR PREHISTORIC LAKE GENEVA.



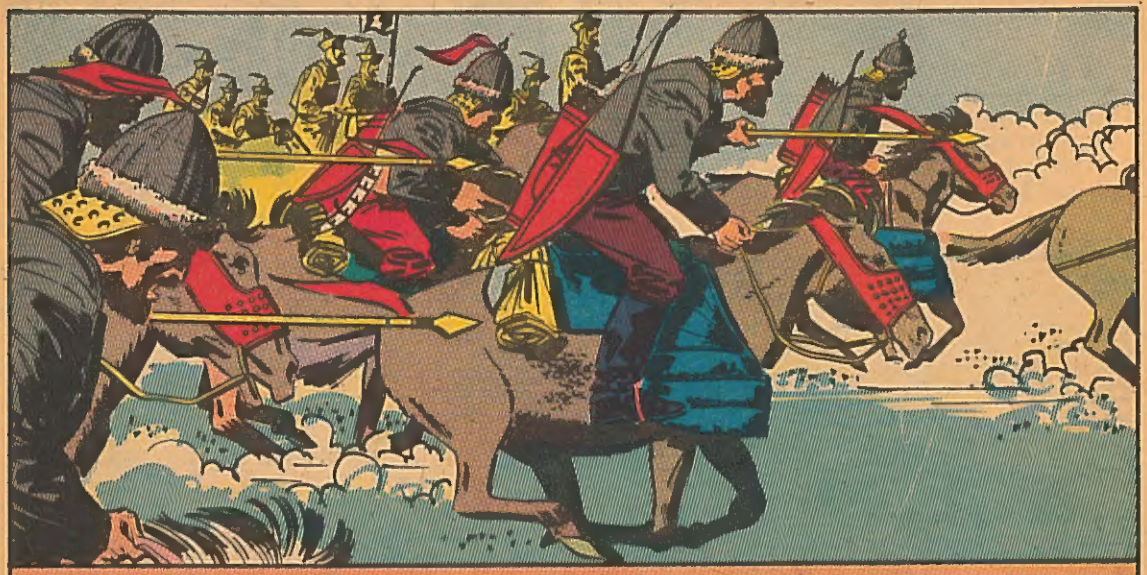
ANCIENT BABYLONIANS WORSHIPPED THE COW AS A GODDESS. SHE WAS CALLED MOTHER OF THE MOON AND HER MILK THE SACRED DRINK OF THE GODS.

HIPPOCRATES, THE FATHER OF MEDICINE, FIRST CALLED MILK THE MOST NEARLY PERFECT FOOD.

BEAUTIFUL CLEOPATRA AND EMPRESS POPEA CONSIDERED MILK A BEAUTIFIER, BOTH AS A BATH AND A DRINK.

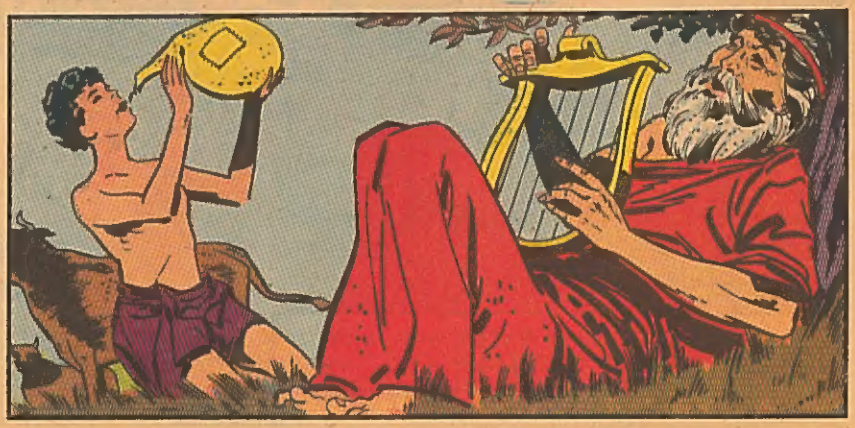


THE FIRST EVIDENCE OF MEN MILKING COWS WAS FOUND IN A TEMPLE WALL PAINTING IN UR OF THE CHALDEANS, ONE OF HISTORY'S OLDEST CITIES.

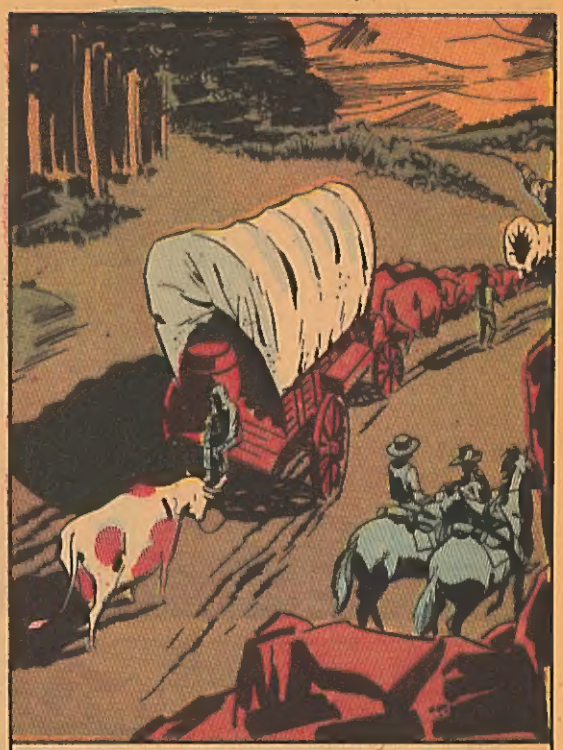


MILK WAS THE FOOD OF FIGHTING MEN OF OLD. THE FIERCE HORSEMEN OF GHENGIS KHAN WHO SWEPT ASIA AND MUCH OF EUROPE WERE MILK DRINKERS.

HOMER, THE BLIND POET, SANG PRAISES OF MILK AS HE STRUMMED HIS LYRE.



THE PILGRIM FATHERS HAD NO CATTLE WHEN THEY LANDED AT PLYMOUTH ROCK IN 1620. THE FOLLOWING YEAR, HOWEVER, 30 CATTLE WERE BROUGHT FROM HOLLAND.

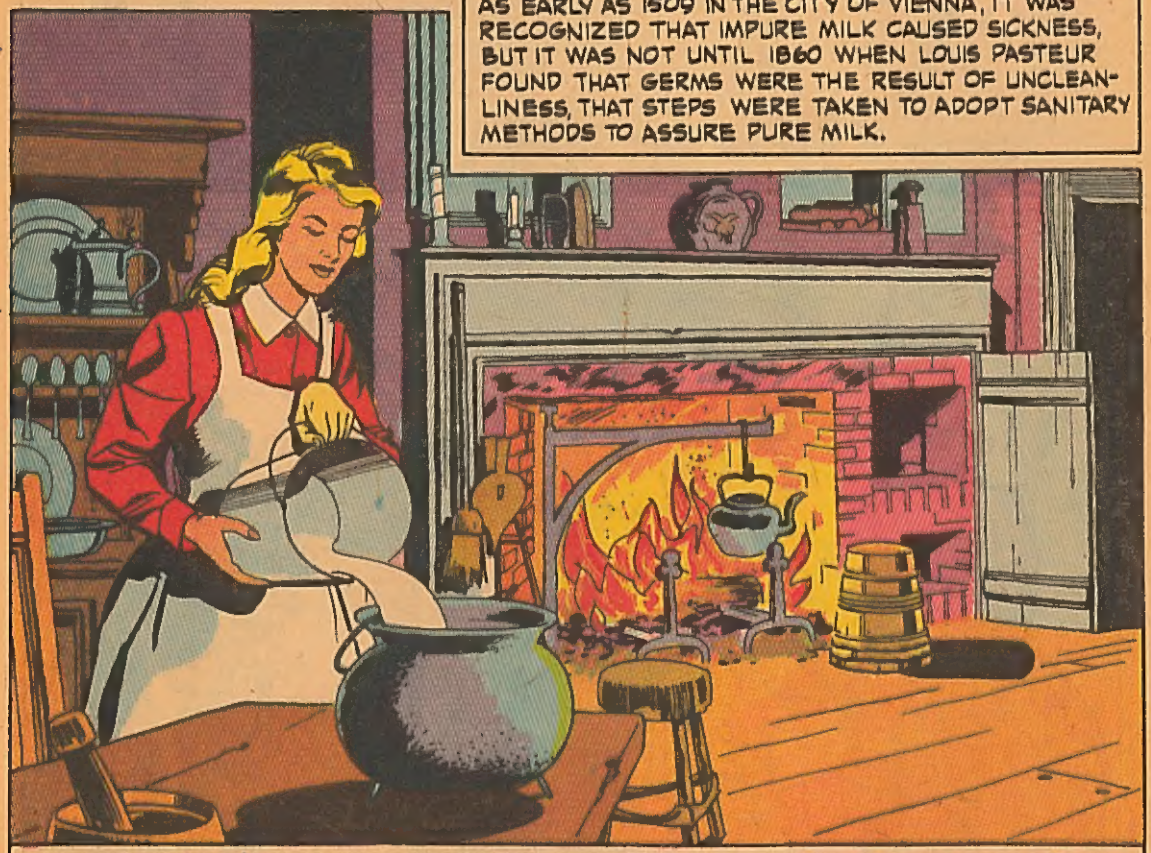


THE COW HELPED TO CONQUER A CONTINENT. WHEN THE PIONEERS HEADED WEST, TIED TO THE TAILBOARD OF EACH COVERED WAGON WERE ONE OR TWO COWS.

TWO HUNDRED YEARS LATER 6 MILLION CATTLE WERE IN THIS COUNTRY. TODAY 35 MILLION CATTLE SUPPLY THE UNITED STATES.

DISEASE DUE TO IMPURE MILK CAUSED A MAJOR TYPHOID EPIDEMIC IN ENGLAND IN 1857, HUNDREDS OF SIMILAR CATASTROPHES FOLLOWED, CREATING A NEED FOR SANITATION.

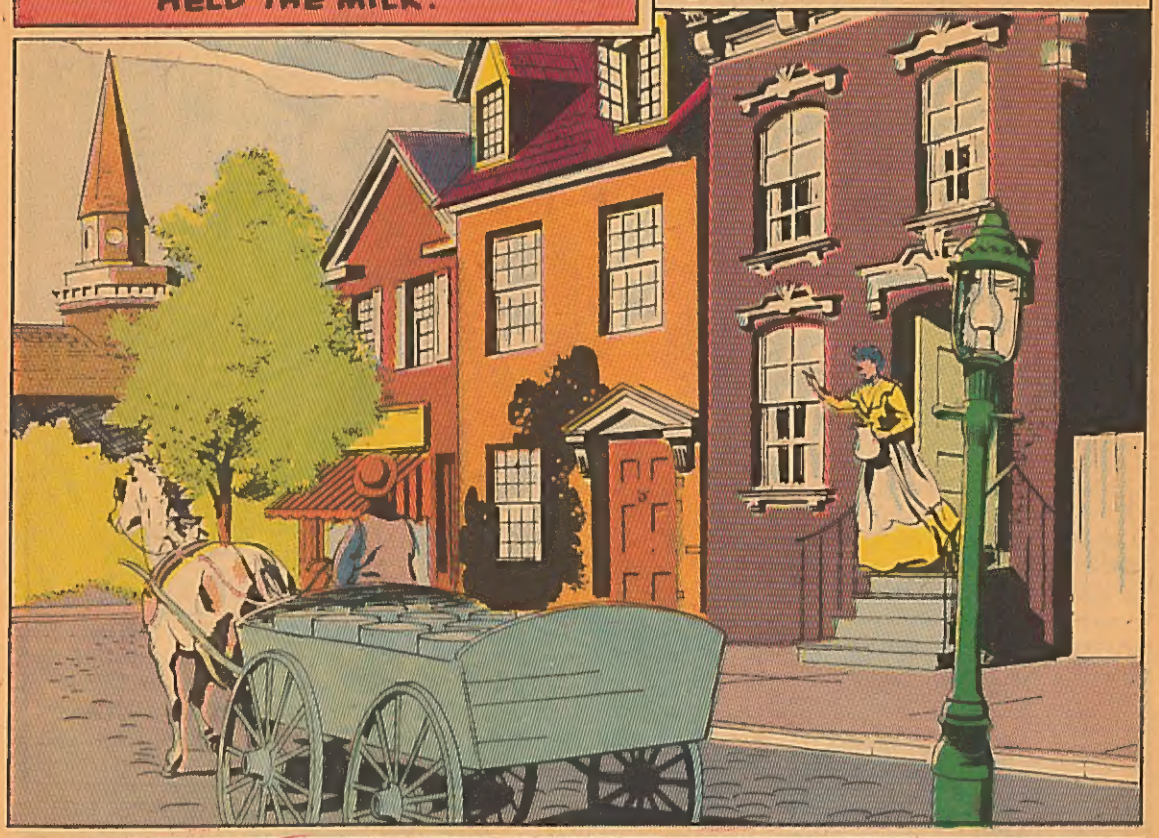
AS EARLY AS 1509 IN THE CITY OF VIENNA, IT WAS RECOGNIZED THAT IMPURE MILK CAUSED SICKNESS, BUT IT WAS NOT UNTIL 1860 WHEN LOUIS PASTEUR FOUND THAT GERMS WERE THE RESULT OF UNCLEANLINESS, THAT STEPS WERE TAKEN TO ADOPT SANITARY METHODS TO ASSURE PURE MILK.



IN 1892, IN AMERICA, IT WAS SUGGESTED THAT THE HOUSEWIFE BOIL MILK AT LEAST ½ HOUR TO ASSURE BACTERIA-FREE MILK. THIS WAS THE FIRST STEP TOWARD PASTEURIZATION.

AS THE PROGRESS OF MILK SANITATION GREW THROUGH THE YEARS, SO ADVANCED THE CONTAINERS THAT HELD THE MILK.

IN THE EARLY 1900'S THE ITINERANT MILKMAN ROAMED THE STREETS WITH A CART FILLED WITH 40-QUART BUCKETS OF MILK.



AS HE TRAVELED FROM HOUSE TO HOUSE HE WOULD LADLE MILK INTO THE HOUSEWIVES OWN PITCHER OR OTHER CONTAINER.

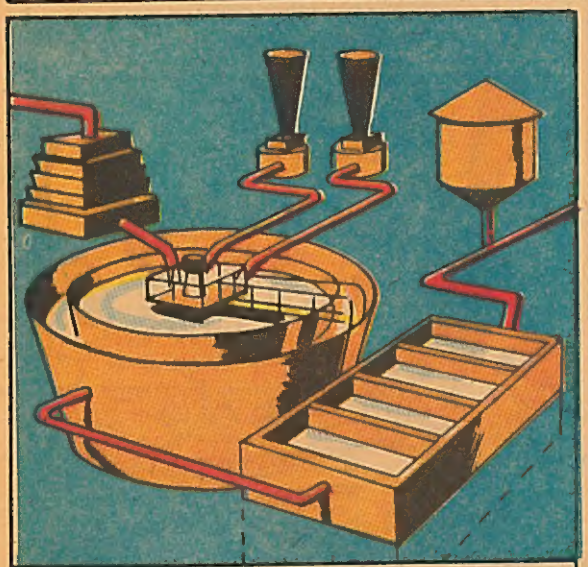
LATER, THE FIRST BOTTLES MADE THEIR APPEARANCE. A GLASS STOPPER, HELD TO THE BOTTLE BY WIRE, FIT, NOT TOO SNUGLY, INTO A RUBBER GASKET. THIS OF COURSE, WAS UNSANITARY.

AMERICAN INGENUITY MADE ITS WAY FELT BY PRODUCING A MILK BOTTLE CLOSURE OR HOOD, TO PROVIDE DOUBLE-CAPPING PROTECTION. THIS PROVIDED THE FINAL SAFEGUARD FOR COMPLETE SANITARY MILK PROTECTION.

SOON, HOWEVER, THE FLAT PAPER DISC CAP WAS INVENTED, BUT THIS DID NOTHING TO PROTECT THE OFTEN HANDLED POURING SURFACE OF THE BOTTLE FROM COMING IN CONTACT WITH POURING MILK.

WITH THE DEVELOPMENT OF PAPER PACKAGING, EARLY MILK CARTONS WERE FASHIONED FROM HEAVY PAPERBOARD WITH A WAX-DIP COATING.

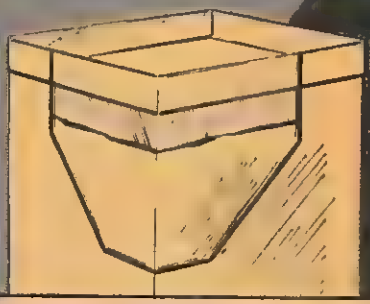
GREAT COMPANIES SOME WITH THEIR OWN PAPER MILLS, MADE EXTENSIVE RESEARCH TO ASSURE THE ULTIMATE IN SANITARY CLOSURES.

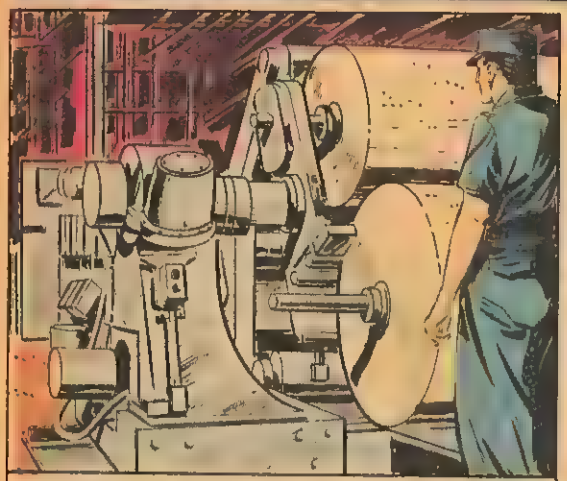


EVEN THE WATER EMPLOYED IN THE PAPER MAKING PROCESS IS PURIFIED BY THE SYSTEMS USED FOR DRINKING WATER IN LARGE CITIES. THE PIPE LINES CARRYING THE WATER ARE MADE OF NON-CONTAMINATING COPPER TO PREVENT THE COLLECTION OF DEPOSITS.

THE PAPER ITSELF USED IN THE DISC CAP AND THE CLOSURE MEETS THE REQUIREMENTS OF SANITATION EQUAL TO THE HIGH STANDARDS FOR THE PURE, HEALTH BESTOWING MILK ITSELF.

THEN IN 1948 A COMPLETELY NEW AND DIFFERENT PAPER MILK CARTON WAS INTRODUCED BY SEALRIGHT, A TRULY MODERN CARTON THAT ELIMINATED THE OLD-FASHIONED WAX-COATED METHODS OF CARTON MAKING.

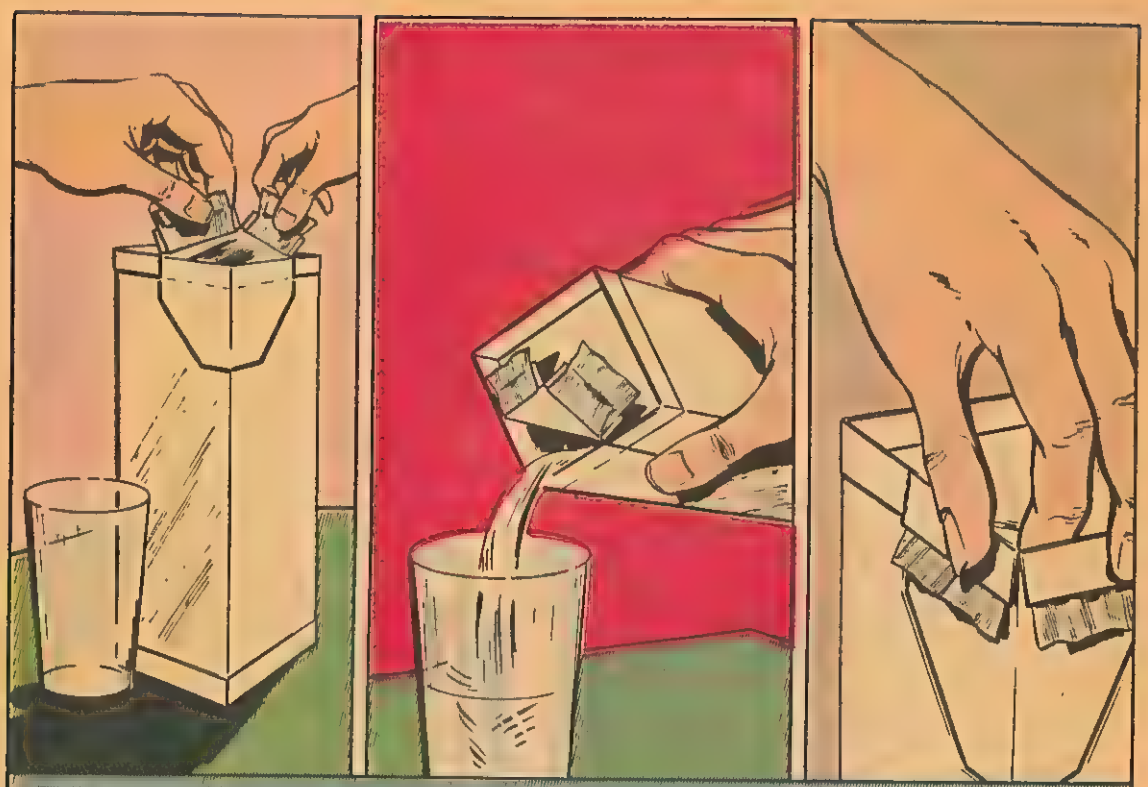




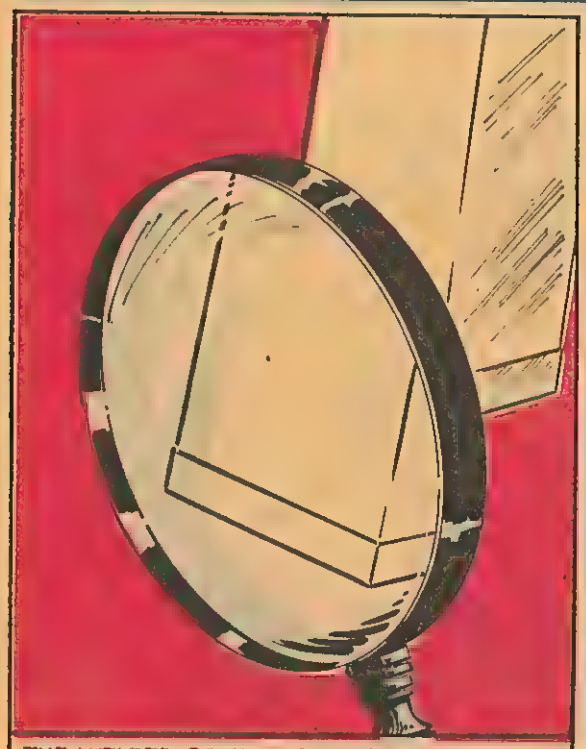
A SPECIAL STRONG AND SANITARY PAPER-BOARD WAS COATED WITH CLEAR LIQUID PLASTIC, THEN FED INTO BLOCK-LONG OVENS FOR DRYING AND STERILIZATION.

THE GIANT ROLLS OF PLASTIC-COATED PAPERBOARD WERE THEN CUT TO SIZE FOR SIDE WALLS, BOTTOMS AND TOPS AND PRINTED WITH SPECIAL DAIRY DESIGNS.

THESE "FLATS" WERE EASIER TO SHIP AND STORE THAN THE OLD STYLE WAX-COATED CARTON THAT WAS FORMED AT THE FACTORY. "FLATS" FOR ONE MILLION QUART CARTONS COULD BE STORED IN ONLY 200 SQUARE FEET OF AVERAGE WARE-HOUSE SPACE.



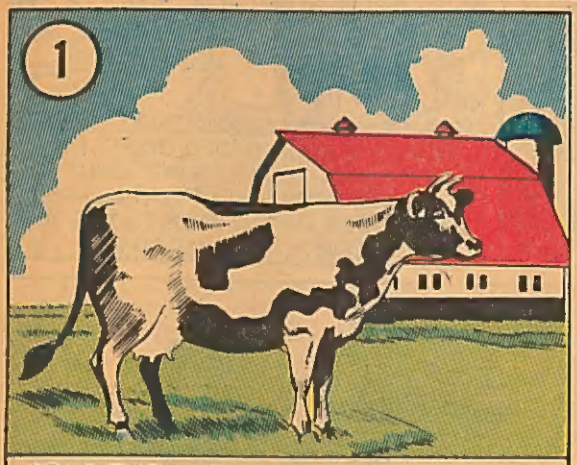
THE CORNER-POUR ON THIS NEW CARTON WAS DESIGNED FOR EASY OPENING, MAXIMUM POURING CONTROL AND COMPLETE SANITARY PROTECTION FOR THE POURING SURFACE.



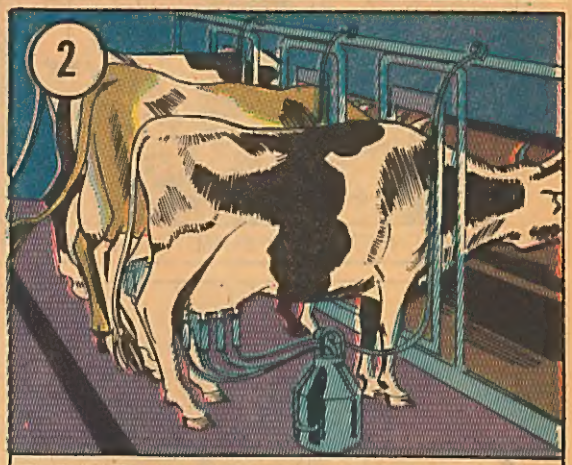
THE WELDED BOTTOM SEAMS ARE STRONG AND DURABLE, HELPING TO ELIMINATE LEAKY CARTONS. PLASTIC-COATING WILL NOT RUB OFF ON REFRIGERATOR SHELVES.

THESE MODERN PLASTIC-COATED PAPER MILK CARTONS ARE SUPPLIED TO DAIRIES IN A COMPLETE RANGE OF SIZES; HALF PINT, THIRD QUART, PINT, QUART, SINGLE-PAK HALF GALLON AND TWIN-PAK HALF GALLON.

IN THIS MODERN AGE THESE ARE STEPS TAKEN TO PROVIDE YOU WITH PURE, FRESH, HEALTHFUL MILK IN SANITARY CONTAINERS

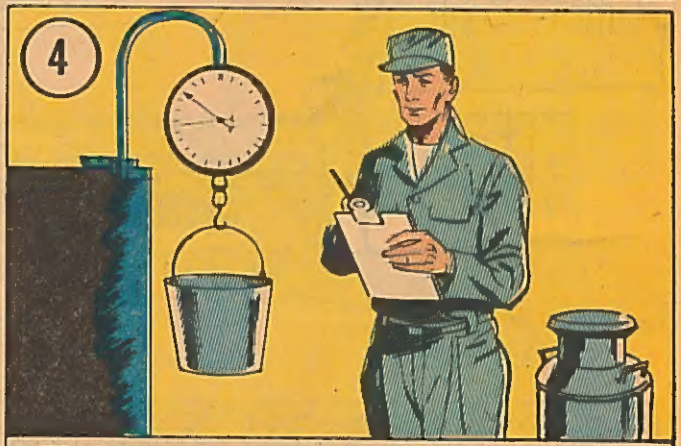


COWS TURN GRASS AND GRAIN INTO MILK.



THEY ARE MILKED AT LEAST TWICE A DAY.

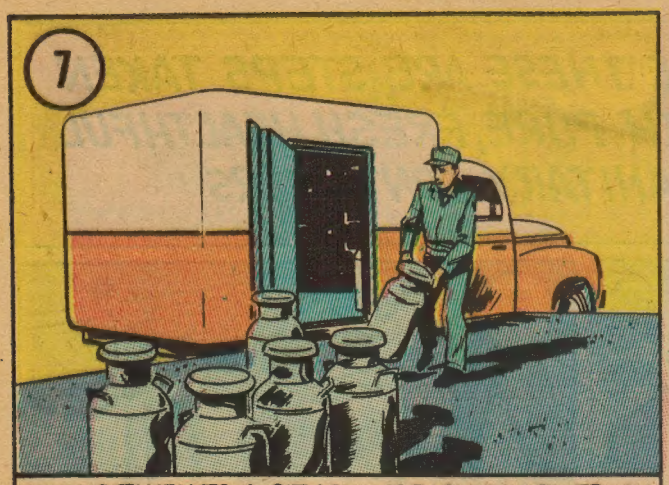
THEIR HEALTH IS CHECKED REGULARLY BY A VETERINARIAN.



A RECORD IS KEPT OF EACH COW'S MILK PRODUCTION

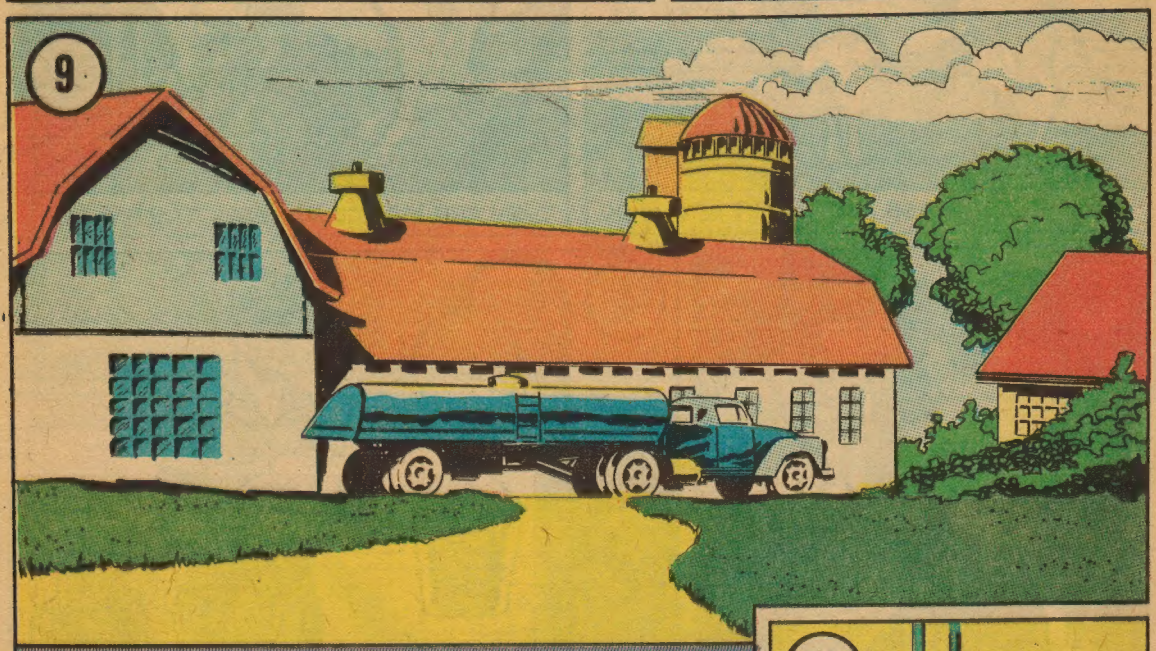
THE WARM MILK IS STRAINED AND COOLED IMMEDIATELY IN THE MILKHOUSE.

ALL EQUIPMENT IS WASHED, STERILIZED AND STORED IN THE MILKHOUSE.

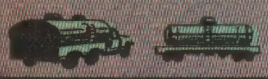


MILK IS TAKEN TO A CITY PLANT EACH DAY BY TRUCK.

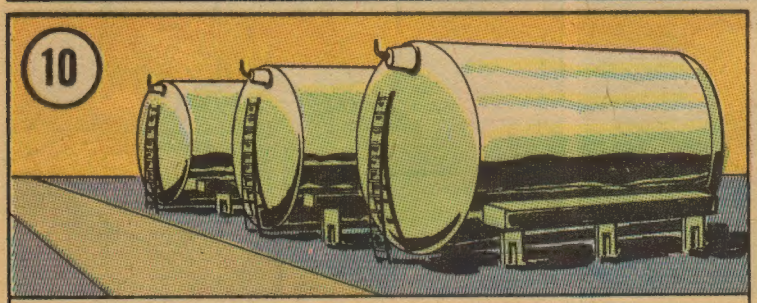
...WHERE IT IS UNLOADED, INSPECTED AND WEIGHED. SAMPLES ARE SENT TO THE LABORATORY FOR TESTING. THE REMAINDER OF THE MILK FLOWS TO THE COOLER IN STERILE PIPES.



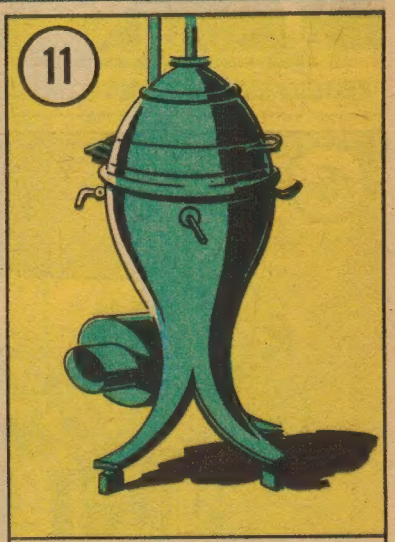
FREQUENTLY THE MILK IS PIPED DIRECTLY INTO ESPECIALLY CONSTRUCTED TANK TRUCKS. IT IS THEN TAKEN TO A COUNTRY RECEIVING STATION OR DIRECTLY TO A CITY PLANT.



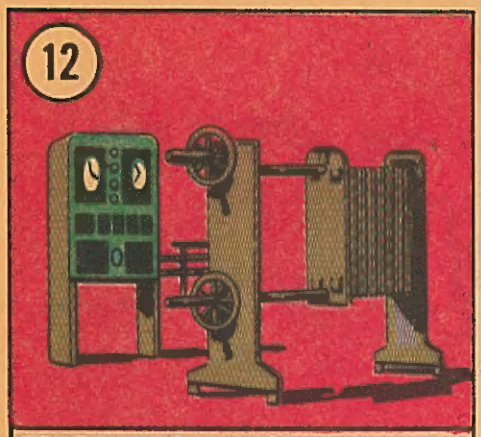
MILK IN TANK TRUCKS OR CARS IS UNLOADED THROUGH PIPES AND WEIGHED AND TESTED AGAIN.



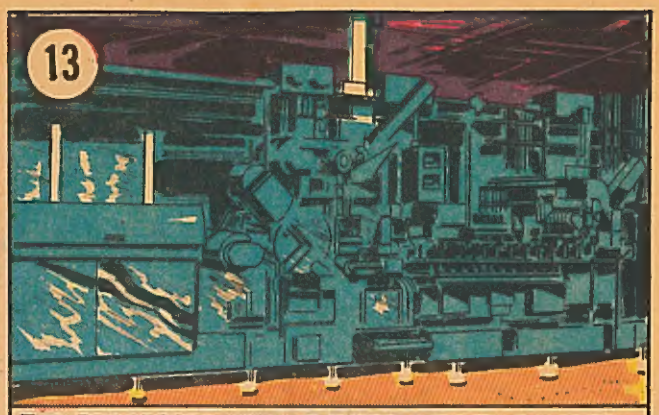
THE CHILLED MILK FLOWS INTO STORAGE TANKS, READY FOR PASTEURIZATION.



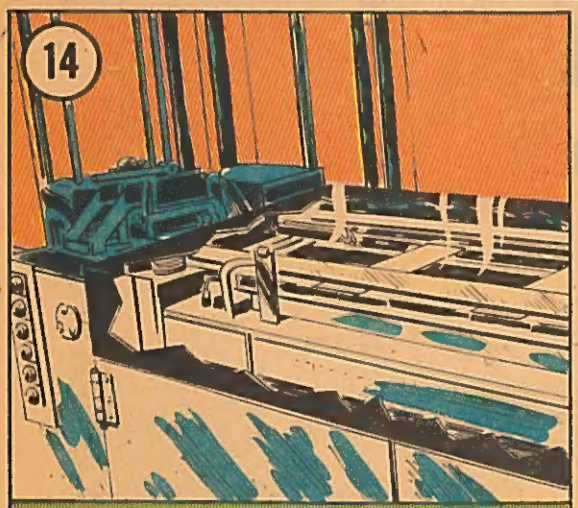
THE COOLED MILK IS THEN CLARIFIED OR FILTERED.



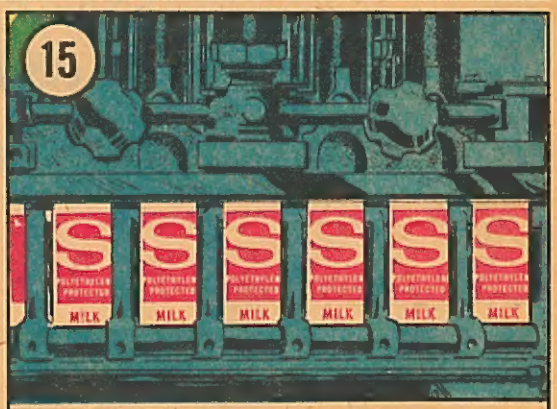
SOME MILK IS HOMOGENIZED. ALL OF IT IS PASTEURIZED IN AUTOMATICALLY CONTROLLED EQUIPMENT.



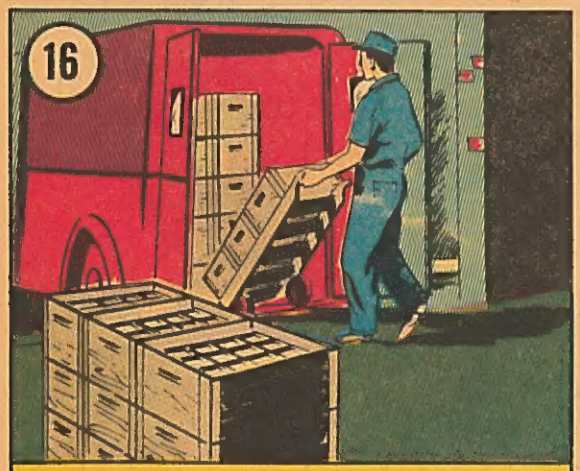
THE PROCESSED MILK IS PIPED INTO THIS MODERN SEALRIGHT MACHINE WHICH STERILIZES THE PLASTIC-COATED CARTON AS IT IS FORMED, THEN FILLS AND SEALS IT.



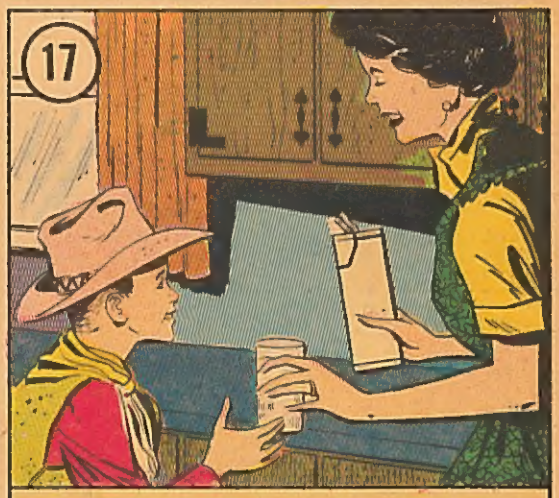
CARTON "FLATS" ARE STERILIZED IN THIS GAS AND ELECTRIC OVEN JUST BEFORE FORMING AND WELDING TO INSURE MAXIMUM SANITARY PROTECTION.



CARTONS ARE THEN FILLED WITH COLD MILK AND THE STERILIZED TOP IS WELDED ON BEFORE MOVING OFF FOR CASING.



CASES ARE STORED IN REFRIGERATED ROOMS AND FINALLY LOADED ONTO TRUCKS FOR DELIVERY.



MODERN DAIRY SCIENCE COMBINES WITH MODERN PACKAGING TO BRING YOU THE WORLD'S MOST PERFECT FOOD IN NO-DEPOSIT, NO-RETURN PLASTIC-COATED PAPER CARTONS.

the MAGIC of MILK

amazing
but true facts
about milk and
milk protection

SK 261-88

PRINTED IN U. S. A.